

FIG. 1

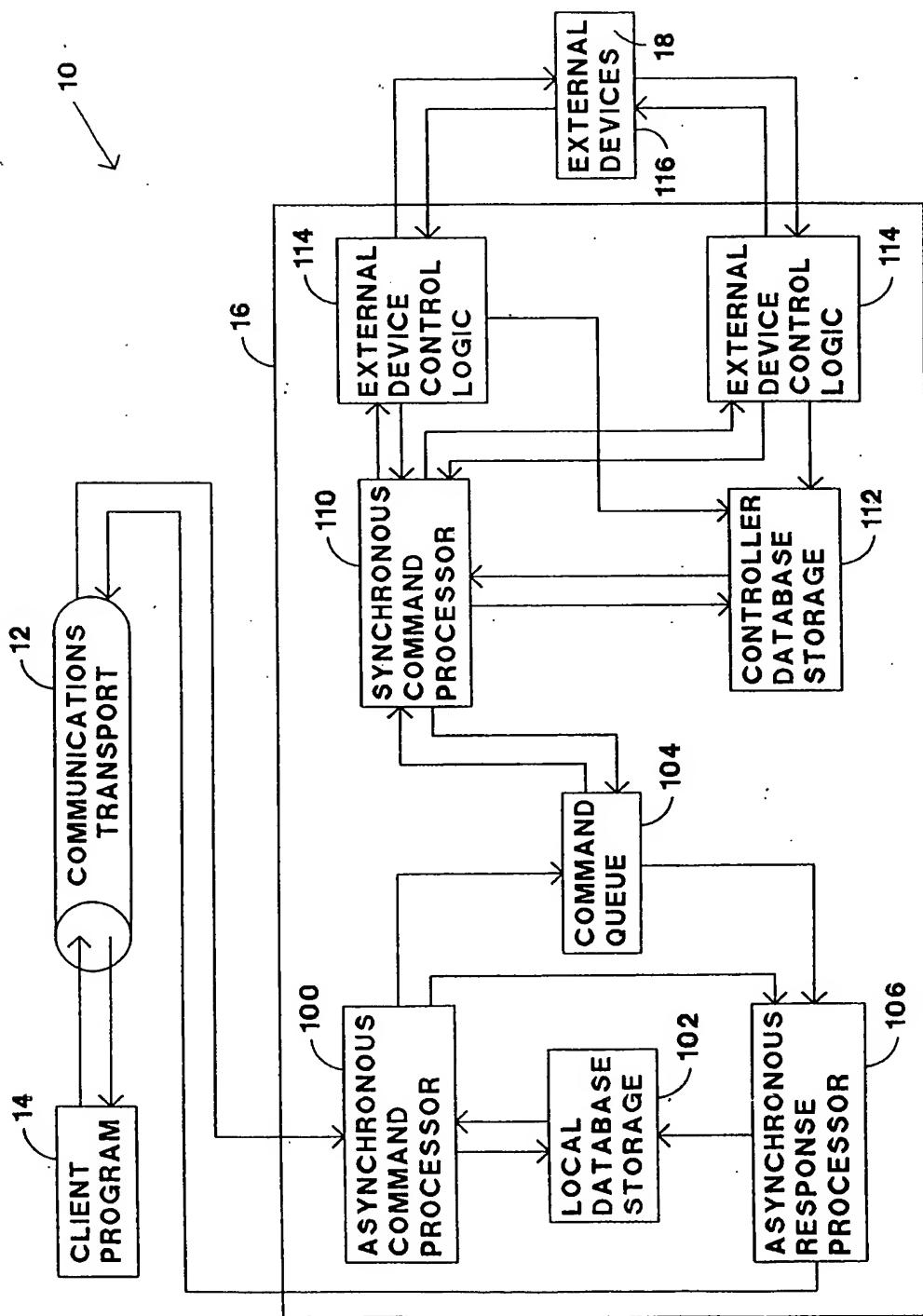


FIG. 2

vv

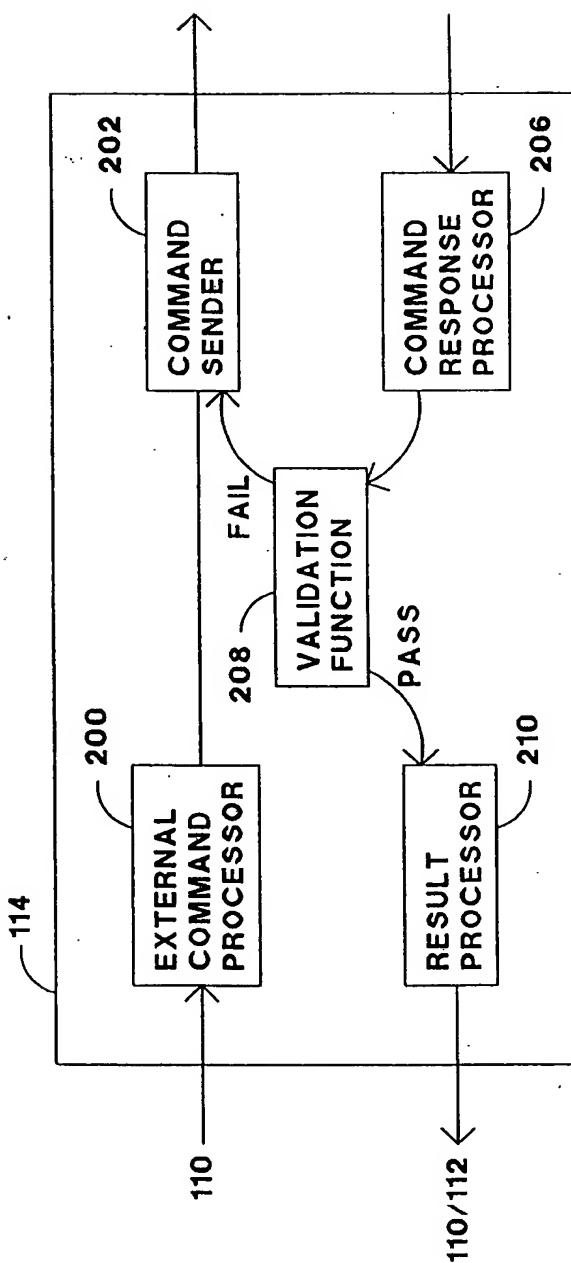
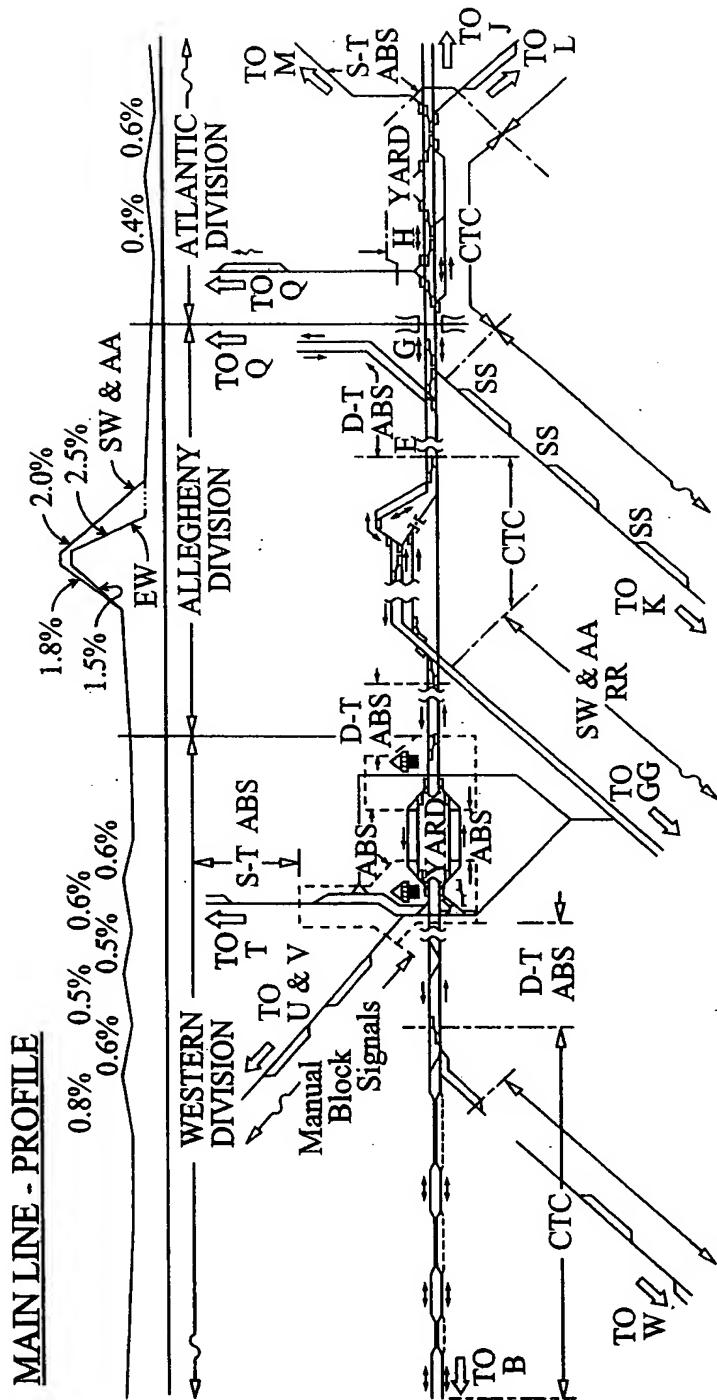


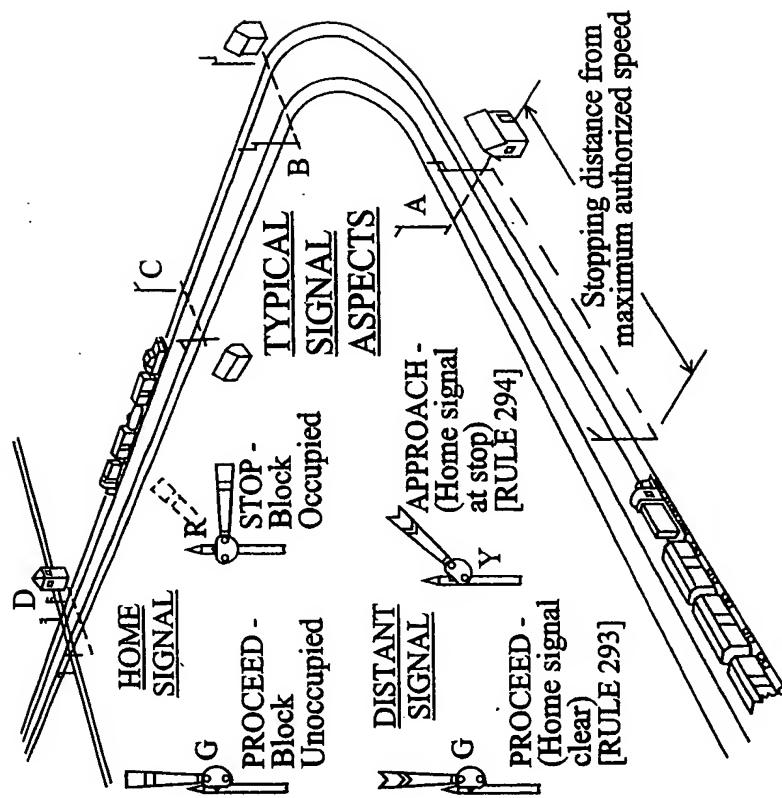
FIG. 3

**KEY:**

	POWER-OPERATED SWITCHES		INTERLOCKING TOWER
	MANUALLY-OPERATED SWITCHES		RESTRICTED CLEARANCE TOWER
	DIRECTION OF SIGNAL-CONTROLLED TRAFFIC		SPRING SWITCH
	DIRECTION OF SIGNAL-CONTROLLED TRAFFIC		DOUBLE-TRACK BLOCK SIGNALS
	DIRECTION OF SIGNAL-CONTROLLED TRAFFIC		SINGLE-TRACK BLOCK SIGNALS

**FIG. 4**

FIG. 5



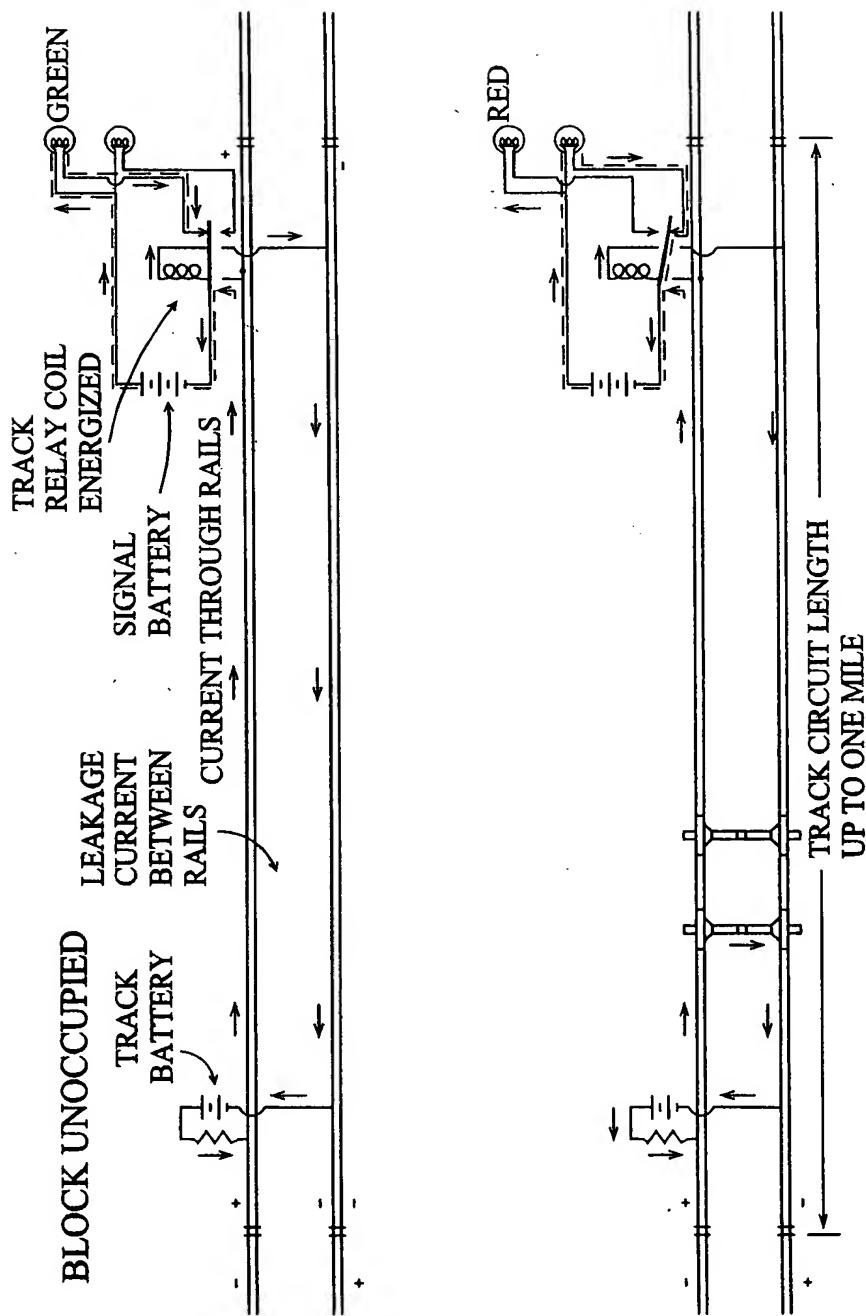


FIG. 6

BLOCK SIGNAL PRACTICE - EXAMPLE

<u>NAME</u>	<u>ASPECT</u>	<u>INDICATION</u>
STOP		STOP AND PROCEED
MARKER PLATE	R	
APPROACH	Y	PROCEED PREPARED TO STOP AT NEXT SIGNAL*
APPROACH MEDIUM	Y	PROCEED PREPARED TO STOP AT SECOND SIGNAL*
ADVANCE APPROACH	Y	PROCEED PREPARED TO STOP AT THIRD SIGNAL†
CLEAR	G	PROCEED

R = RED Y = YELLOW G = GREEN

\* TRAIN EXCEEDING MEDIUM SPEED MUST IMMEDIATELY REDUCE TO THAT SPEED

† TRAIN EXCEEDING LIMITED SPEED MUST IMMEDIATELY REDUCE TO THAT SPEED

FIG. 7A

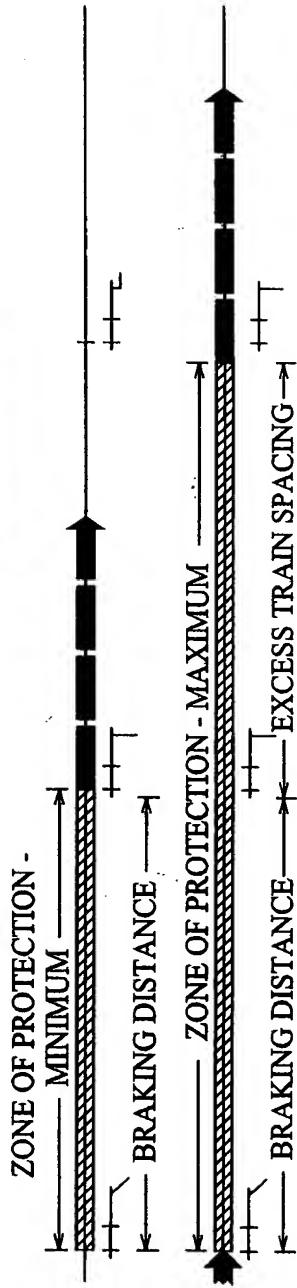
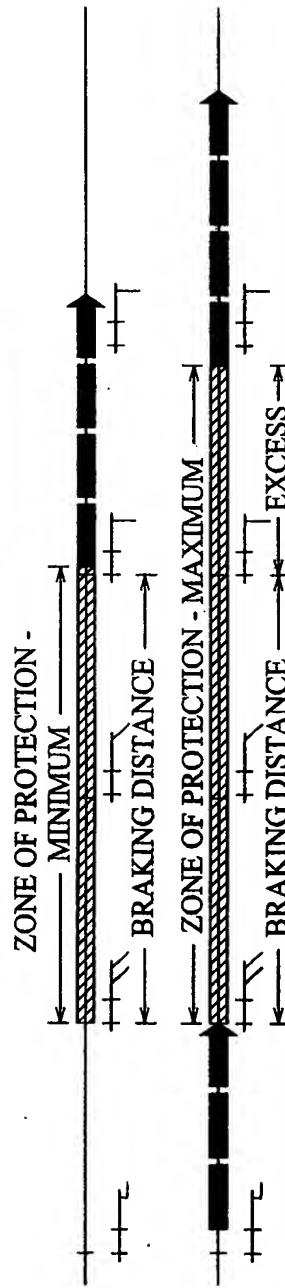
TWO - BLOCK, THREE - INDICATIONTHREE - BLOCK, FOUR - INDICATIONFOUR - BLOCK, FIVE - INDICATION

FIG. 7B

<u>NAME</u>	<u>INDICATION</u>	<u>ASPECTS:</u>	<u>SEMAPHORE</u> <u>(UPPER</u> <u>QUADRANT)</u>	<u>COLOR</u> <u>LIGHT</u>	<u>SEARCH-</u> <u>LIGHT</u>	<u>POSITION</u> <u>LIGHT</u> <u>(MODIFIED)</u>	<u>COLOR</u> <u>POSITION</u> <u>LIGHT</u>
CLEAR	PROCEED AT NORMAL SPEED (RULE 281)			G			
APPROACH	APPROACH PREPARED TO STOP AT NEXT SIGNAL (RULE 285)			Y			
	STOP AND PROCEED			R			
ABSOLUTE STOP		(RULE 509)		R			
	STOP (RULE 292)			R			
				R			
				R			
				R			

R = RED  
Y = YELLOW  
G = GREEN  
W = LUNER WHITE

FIG. 8

ASPECTS OF SIGNALS AT:	A	B	C
IF CLEARED FOR ROUTE STRAIGHT THROUGH TO TRACK ① (NORMAL SPEED)	G R R	G R R	G R R
IF CLEARED FOR DIVERGING ROUTE THROUGH HIGH-SPEED TURNOUT TO TRACK ② (LIMITED SPEED = 50 MPH)	G R R	Y G G	R G G
IF CLEARED FOR DIVERGING ROUTE THROUGH NO. 16 CROSSOVER TO TRACK ③ (MEDIUM SPEED = 30 MPH)	G Y R	Y G R	G R R
IF CLEARED FOR DIVERGING ROUTE THROUGH NO. 12 CROSSOVER INTO TRACK ④ (SLOW SPEED = 15 MPH)	Y G R	Y R G	R G G

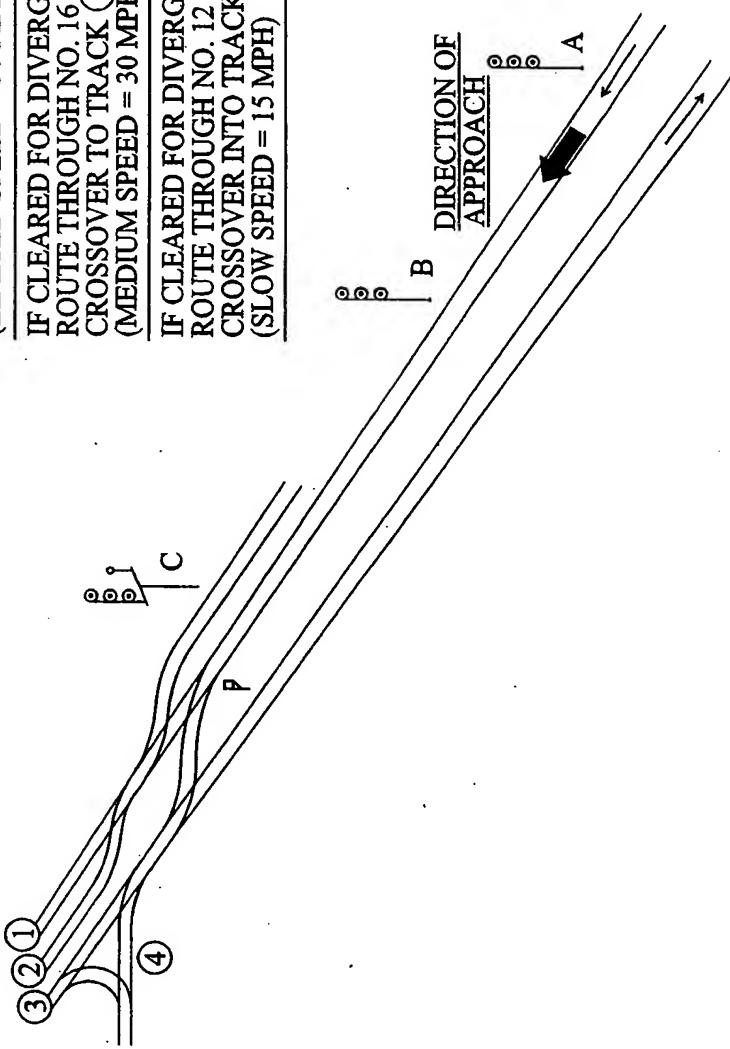


FIG. 9A

ASPECT	NAME	INDICATION
G	CLEAR	PROCEED AT NORMAL SPEED
R		
R		
Y	APPROACH	PROCEED APPROACHING NEXT SIGNAL PREPARED TO STOP; TRAIN EXCEEDING MEDIUM SPEED MUST IMMEDIATELY REDUCE TO THAT SPEED.
R		
R		
Y	APPROACH SLOW	PROCEED APPROACHING NEXT SIGNAL AT SLOW SPEED; TRAIN EXCEEDING MEDIUM SPEED MUST IMMEDIATELY REDUCE TO THAT SPEED.
R		
G		
G	ADVANCE APPROACH MEDIUM	PROCEED APPROACHING SECOND SIGNAL AT MEDIUM SPEED.
Y	APPROACH MEDIUM	PROCEED APPROACHING NEXT SIGNAL AT MEDIUM SPEED.
R		
Y	APPROACH MEDIUM	PROCEED APPROACHING NEXT SIGNAL AT MEDIUM SPEED.
G*		
R		
R		
Y	APPROACH LIMITED	PROCEED APPROACHING NEXT SIGNAL AT LIMITED SPEED.
G*		
R		
R	MEDIUM CLEAR	PROCEED; MEDIUM SPEED WITHIN INTERLOCKING LIMITS
G		
R		
R	LIMITED CLEAR	PROCEED; LIMITED SPEED WITHIN INTERLOCKING LIMITS
G*		
R		
R	SLOW CLEAR	PROCEED; SLOW SPEED WITHIN INTERLOCKING LIMITS
G		

\* May be replaced with triangular marker plate below second signal head (indicating "limited speed") if layout does not include medium speed routes

FIG. 9B

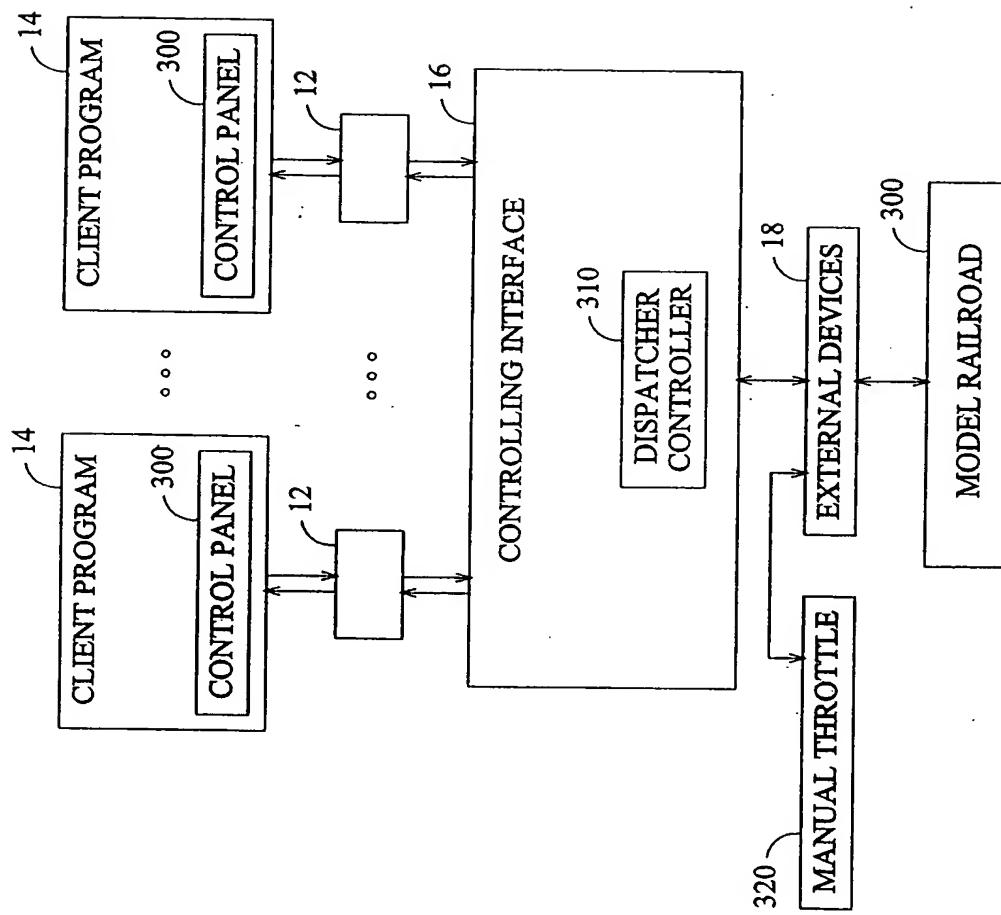


FIG. 10

### COMMAND QUEUE

PRIORITY	TYPE	COMMAND
5	A	INCREASE LOCO 1 BY 2
37	B	OPEN SWITCH 1
15	B	CLOSE SWITCH 1
26	B	OPEN SWITCH 1
6	A	DECREASE LOCO 2 BY 5
176	B	CLOSE SWITCH 6
123	C	TURN ON LIGHT 5
85	D	QUERY LOCO 3
5	A	INCREASE LOCO 2 BY 7
9	A	DECREASE LOCO 1 BY 2
0	E	MISC
37	D	QUERY LOCO 2
215	D	QUERY SWITCH 1
216	C	TURN ON LIGHT 3
227	D	QUERY SWITCH 5
225	C	TURN ON LOCO 1 LIGHT
0	D	QUERY ALL
255	A	STOP LOCO 1

FIG. 11